

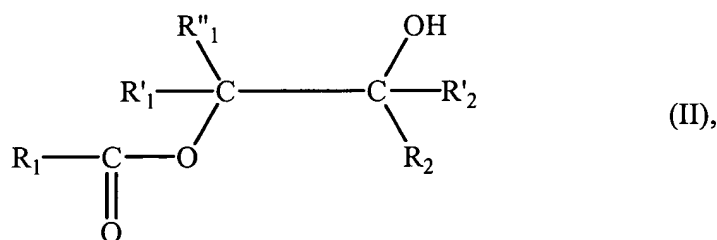
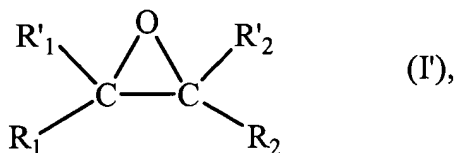
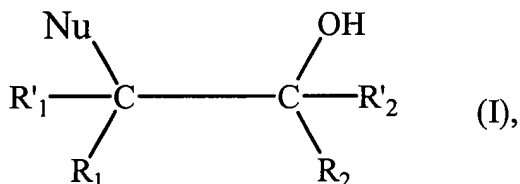
Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

110. (Amended) A method for solid phase oligonucleotide synthesis, comprising the steps of:

a) providing a universal solid support compound ~~compound~~ selected from the group consisting of:



wherein:

one of R_1 , R'_1 , R''_1 , R_2 , and R'_2 is selected from the group consisting of an inorganic or organic polymer and a hydrocarbon diradical substituted with an inorganic or organic polymer, and the others are H;

Nu is a nucleophilic group selected from the group consisting of $-\text{NH}_2$, $-\text{O}-\text{Alk}$, $-\text{NHAlk}$, $-\text{N}(\text{Alk})_2$, $-\text{NHAc}$, $-\text{NH}-\text{C}_{1-7}$ acyl, $-\text{OAe}$, $-\text{O}-\text{C}_{1-7}$ acyl, $-\text{SAe}$, $-\text{S}-\text{C}_{1-7}$ acyl, and $-\text{S}-\text{Alk}$ and ~~halogen~~, wherein said Alk is a C_1 to C_7 alkyl group which is optionally

substituted with a halogen, and said Ae is a C₁ to C₇ acyl group is optionally substituted with a halogen;

b) opening the epoxide ring if said universal solid support is structure (I') to generate structure (I);

c) condensing the OH group of structures (I) or (II) with a nucleotide monomer reagent having a 3' or 5' substitution selected from the group consisting of phosphate, phosphite, phosphoramidite, H-phosphonate, phosphotriester, and phosphodiester to generate a solid support-monomer product;

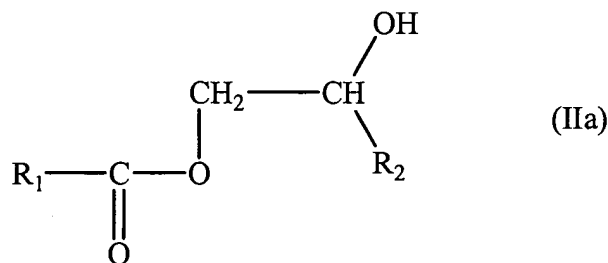
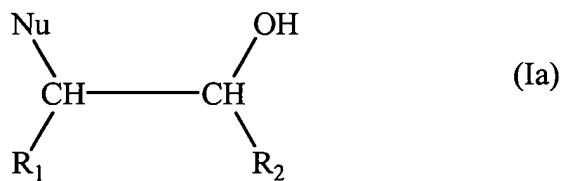
d) reacting the product of step (c) with an additional said nucleotide monomer reagent according to a conventional method of oligonucleotide synthesis;

e) repeatedly attaching said nucleotide monomer reagents according to the conventional method of oligonucleotide synthesis as many times as needed to obtain the oligonucleotide attached to the support;

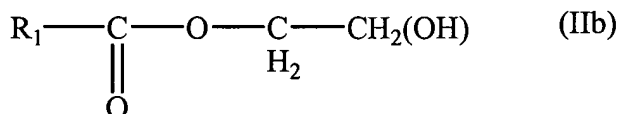
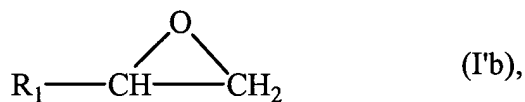
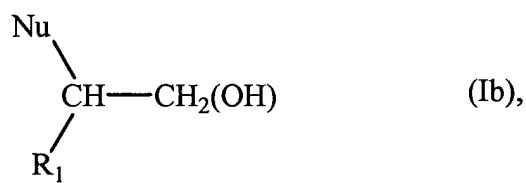
f) cleaving the oligonucleotide from the support by adding a base or nucleophile resulting in intramolecular nucleophilic displacement, whereby the cleaved oligonucleotide has a free 5' or 3'OH.

111. (Previously Presented) The ~~compound~~method of claim 110, wherein Nu is selected from the group consisting of -N(Alk)₂, -NHAe- C₁₋₄ acyl, -OAC- C₁₋₄ acyl, and -Sae- C₁₋₄ acyl-~~and a halogen~~, wherein said Alk group is a C₁ to C₄ alkyl group optionally substituted with at least one halogen, and said Ae acyl group is a ~~C₁ to C₄ acyl~~ group optionally substituted with at least one halogen.

112. (Previously Presented) The ~~compound~~method of claim 110, wherein said ~~compound~~universal solid support is selected from the group consisting of:



113. (Previously Presented) The ~~compound~~ method of claim 110 wherein the universal solid support is selected from the group consisting of:



could wherein if the structure is (II'b), it undergoes the epoxide ring opening step (b) of claim 110 to generate structure (I).

114. (New) The method of claim 110, wherein the nucleotide monomer reagents are phosphoramidites.